



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application: **Beukema et al.**

Serial No.: **09/925,578**

Filed: **August 9, 2001**

For: **Apparatus and Method for
Implementing Multicast on a System
Area Network Channel Adapter**

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Group Art Unit: **2151**

Examiner: **Walsh, John B.**

Attorney Docket No.: **AUS920010473US1**

Certificate of Mailing Under 37 C.F.R. § 1.8(a)

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By: _____

Jennifer Picher

DECLARATION UNDER RULE 1.131

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Gregory Francis Pfister, an inventor in the above-identified patent application, declare as follows:

1. I am an inventor of the above-identified patent application.
2. I am/was an employee of International Business Machines Corporation, Inc. at the time the invention was conceived.
3. The invention as claimed was conceived in the United States.
4. The invention as claimed in the above-identified application was conceived on or before May 1, 2001.
5. The invention as claimed is disclosed in the attached disclosure that was last modified on May 1, 2001.

The declarant further states that the above statements were made with knowledge that willful false statements and the like are punishable by fine and/or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that any such willful false statement may jeopardize the validity of this application or any patent resulting therefrom.

DATE: JUNE 28, 2006

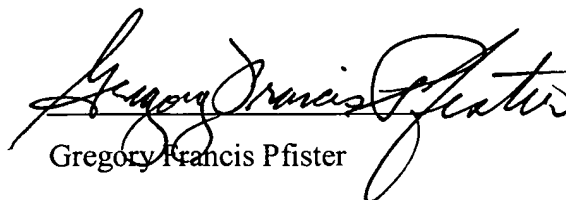
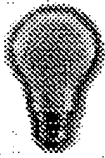

Gregory Francis Pfister

Exhibit A



Disclosure AUS8-2001-0626

Prepared for and/or by an IBM Attorney - IBM Confidential

Created By: Steve Thurber Created On: 04/01/2001 12:46:29 PM

Last Modified By: Nancy Werchan Last Modified On: 05/01/2001 12:31:30 PM

Required fields are marked with the asterisk (*) and must be filled in to complete the form.

*Title of disclosure (in English)

013-IB Implementing Multicast on InfiniBand Channel Adapters

Summary

Status	Under Evaluation
Processing Location	AUS
Functional Area	03 -SD- ADV. TECHNOLOGY DEV. (A.O. Befi)
Attorney/Patent Professional	Cas Salys/Austin/IBM
IDT Team	Gordon Fossum/Austin/IBM; Barbara Gutierrez/Austin/IBM@IBMUS; Dave Willoughby/Austin/IBM@IBMUS; Greg Pfister/Austin/IBM@IBMUS; Guy Guthrie/Austin/IBM@IBMUS; John Upton/Austin/IBM@IBMUS; Kevin Juhl/Austin/IBM@IBMUS; Kurt Szabo/Austin/IBM@IBMUS; Mark McBumey/Austin/IBM@IBMUS; Pat Buckland/Austin/IBM@IBMUS; Renato Recio/Austin/IBM@IBMUS; Steve Thurber/Austin/IBM@IBMUS
Submitted Date	04/17/2001 09:28:46 PM EDT
Owning Division	SD
Incentive Program	(INC12) Storage Networking
Lab	
Technology Code	%INC12%
PVT Score	No PVT score has been calculated. To calculate a PVT score, press the 'Calculate' button.

Inventors with a Blue Pages entry

Inventors: Steve Thurber/Austin/IBM, Renato Recio/Austin/IBM, Greg Pfister/Austin/IBM

Inventor Name	Inventor Serial	Div/Dept	Inventor Phone	Manager Name
> Thurber, S.M. (Steve)	290922	7T/52TA	678-1844	Seminaro, Edward J.
Recio, R.J. (Renato)	275161	7T/H58A	678-3685	Rockefeller, William L.
Pfister, G.F. (Greg) Dr.	073563	7T/H58A	678-8338	Rockefeller, William L.

> denotes primary contact

Inventors without a Blue Pages entry

IDT Selection

*Main Idea

1. Describe your invention, stating the problem solved (if appropriate), and indicating the advantages of using the invention.

InfiniBand uses Queue Pairs (Send and Receive Work Queues) to transmit and receive

***Main Idea**

1. Describe your invention, stating the problem solved (if appropriate), and indicating the advantages of using the invention.

InfiniBand uses Queue Pairs (Send and Receive Work Queues) to transmit and receive messages between IB components (Host Channel Adapters, Target Channel Adapters, Switches, and Routers). IB QPs can be attached to multicast groups and thereby receive all messages which address the multicast group. Within an IB Channel Interface (Channel Adapter, plus CA software), more than one QP can be associated with a given multicast group. When more than one QP is associated with a given multicast group, it is the CIs responsibility to perform the multicast function to all QPs that are associated with the multicast group.

This disclosure covers the three approaches that can be used within a Channel Interface to perform the multicast function to more than one QP. The three mechanisms are: software based multicast, hardware based multicast, and a combination of the two.

2. How does the invention solve the problem or achieve an advantage,(a description of "the invention", including figures inline as appropriate)?

3. If the same advantage or problem has been identified by others (inside/outside IBM), how have those others solved it and does your solution differ and why is it better?

4. If the invention is implemented in a product or prototype, include technical details, purpose, disclosure details to others and the date of that implementation.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Exhibit B

International Business Machines Corporation
Intellectual Property Law
11400 Burnet Road - 4054
Austin, Texas 78758
Voice: (512) 823-0092 Fax: 823-1036
email: salys@us.ibm.com

PREPARED BY IBM ATTORNEY

May 7, 2001

Carstens, Yee & Cahoon

Subject: IBM Docket Number AUS920010473US1

Dear Duke:

You are being retained to prepare a patent application for the subject IBM docket.

Enclosed is a copy of IBM invention disclosure AUS820010626 and supporting material for the Docket. The patent application is to be prepared according to the IBM AUSTIN INTELLECTUAL PROPERTY LAW DEPARTMENT OUTSIDE COUNSEL & ADMINISTRATIVE PROCEDURES.

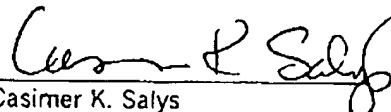
The key feature of the invention is an Infiniband protocol channel interface capable of multicast to more than one queue pair using software, hardware, or a combination of such.

Steve Thurber, the key inventor contact, has been notified that you will be preparing this patent application and has agreed to the schedule set forth below. The inventor's telephone number is 838-1844 and fax number is 838-8378.

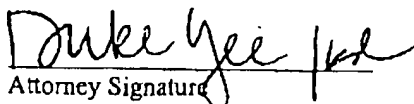
From our previous telephone discussion you have agreed to complete the patent application for execution by the inventor(s) and deliver it to us by August 6, 2001 for a fee of [REDACTED] including distribution and the IDS. Please sign and return a copy of this letter indicating your agreement.

Please feel free to contact me if you have any questions or concerns.

Sincerely,


Casimer K. Salys
Intellectual Property Law

I agree that an execution copy of the above application will be completed and sent to IBM IPLaw on or before August 6, 2001 for a professional fee of [REDACTED] including IDS and distribution.


Attorney Signature

5-14-01
Date